

CLAIMS

1. An aqueous seed treatment insecticidal and/or nematicidal composition in the form of a suspension comprising:

(A) at least one insecticide and/or nematicide in an amount of at least 3 weight %, based on the weight of the composition, and optionally at least one other substance which has a melting point above 30°C; and

(B) at least two surface active compounds, wherein (i) at least one surface active compound has a molecular weight of less than 2200 and a Hydrophile-Lipophilic Balance (HLB) of at least 10 and (ii) at least one surface active compound is non-ionic, has a molecular weight of at least 2200, wherein 10 to 60 % of the compound molecular weight contributes to the hydrophile constituent of the compound, and the molecular weight of the hydrophobe constituent of the compound is from 2000 to 10000;

provided that the weight ratio of (B):(A) is in the range 0.08 to 0.5, and the weight ratio of (ii):(i) is at least 0.5.

2. The composition of claim 1, wherein the ratio of (B):(A) is 0.1 to 0.3, preferably 0.15 to 0.25.

3. The composition of either claim 1 or claim 2, wherein the ratio of surface active compounds (ii):(i) is at least 1.0, preferably at least 1.5, especially in the range 2 to 5, advantageously in the range 2 to 3.

4. The composition according to any one of claims 1 to 3, wherein (B)(i) is ionic, preferably anionic.

5. The composition according to any one of claims 1 to 4, wherein (B)(i) has a molecular weight of less than 1700, such as in the range 400 to 1500, preferably in the range 600 to 1200.

6. The composition according to any one of claims 1 to 5, wherein (B)(i) has a HLB value in the range 10 to 25, such as 12 to 20, preferably 14 to 18.

-21-

7. The composition according to any one of claims 1 to 6, wherein (B)(ii) has a molecular weight of at least 3000, such as in the range of 3500 to 15000, especially 4000 to 7500, advantageously 4500 to 6000.
- 5 8. The composition according to any one of claims 1 to 6, wherein two surface active compounds (B)(ii) are present.
9. The composition according to claim 8, wherein the first surface active compound has a molecular weight of the hydrophobe constituent of from 2400 to 3900, preferably 3000 to 3800, such as 3200 to 3700 and, independent of the hydrophobe molecular weight, a proportion of the molecular weight of the hydrophile constituent of from 13 to 45, preferably 17 to 40, such as 18 to 30, %; and the second surface active compound has a molecular weight of the hydrophobe constituent of from 2200 to 3900, preferably 2500 to 3600, such as 2700 to 3200 and, independent of the hydrophobe molecular weight, a proportion of the molecular weight of the hydrophile constituent of from 43 to 67, preferably 45 to 65, such as 50 to 60, %.
- 10 3800, such as 3200 to 3700 and, independent of the hydrophobe molecular weight, a proportion of the molecular weight of the hydrophile constituent of from 13 to 45, preferably 17 to 40, such as 18 to 30, %; and the second surface active compound has a molecular weight of the hydrophobe constituent of from 2200 to 3900, preferably 2500 to 3600, such as 2700 to 3200 and, independent of the hydrophobe molecular weight, a proportion of the molecular weight of the hydrophile constituent of from 43 to 67, preferably 45 to 65, such as 50 to 60, %.
- 15 10. The composition according to any one of claims 1 to 9, wherein a (B)(i) surface active compound is selected from a sulfate type surfactant and a phosphate type surfactant, especially a phosphate type surfactant.
- 20 11. The composition according to any one of claims 1 to 10, wherein each (B)(ii) surface active compound is a polyalkylene oxide polymer.
- 25 12. The composition according to claim 11, where each copolymer is a block polymer.
13. The composition according to any one of claims 1 to 12, wherein (A) is abamectin.
14. A slurry composition comprising the composition defined in any one of claims 1 to 13, a liquid carrier and optionally (i) one or more formulation adjuvants, (ii) one or more other pesticidal compositions, each comprising at least one further pesticide, or both (i) and (ii).
- 30 15. A method of protecting plant propagation material from attack by pests by treating the material with a pesticidally effective amount of the composition claimed in any one of claims 1 to 14.
- 35

-22-

16 A pest resistant plant propagation material comprising a plant propagation material treated with a pesticidally effective amount of the composition claimed in any one of claims 1 to 14 or obtained by the method claimed in claim 15.

5 17. Use in a pesticidal composition or slurry composition, to improve the dust-off property of a plant propagation material that has been treated with the composition, of:

10 at least two surface active compounds, wherein (i) at least one surface active compound has a molecular weight of less than 2200 and a Hydrophile-Lipophilic Balance (HLB) of at least 10 and (ii) at least one surface active compound is non-ionic, has a molecular weight of at least 2200, wherein 10 to 85 % of the compound molecular weight contributes to the hydrophile constituent of the compound, and the molecular weight of the hydrophobe constituent of the compound is from 2000 to 10000;

15 provided that the weight ratio of the surface active compounds to one or more pesticides, and optionally at least one other substance which has a melting point above 30°C, in the pesticidal composition or slurry composition, is in the range 0.08 to 0.5, and the weight ratio of (ii):(i) is at least 0.5.